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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/612,461

07/01/2003

Donald J. Curry

117292

3105

7590

09/08/2006

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EXAMINER

CHAWAN, SHEELA C

ART UNIT

PAPER NUMBER

2624

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/612,461	Applicant(s) CURRY ET AL.	
	Examiner Sheela C. Chawan	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,10,11 and 19 is/are rejected.
- 7) ☒ Claim(s) 3-9,12-18 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/9/03,5/12/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. Information Disclosure Statement filed on 12/09/03 and 5/12/04 have been considered by the examiner.

Drawings

2. Drawings filed 7/01/03 have been approved by the examiner.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 10-11 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Feng et al. (US 6,995,866 B2).

As to claims 1, 10 and 19, Feng et al. disclose a method for background suppression (16 in Figure 1 is a background suppression block) and color adjustment (chroma adjustment block 18 in Figure 1 is a color adjustment block), comprising the steps of:

passing an input signal (column 1, lines 52-67; RGB is converted to LAB at 14 in Figure 1) through independent lookup tables (column 4, lines 12-20), each operating on separate color components (in LAB color space “L” represents luminance or lightness component and “a” and “b” represents chrominance or color components; see column 2, lines 52-61) for outputting an adjusted pixel value (output of block 26 in Figure 2 provides the adjusted pixel value);

determining if the luminance of the adjusted pixel value is at one of its two extremes (column 3, lines 36-47; column 4, lines 12-24);

if adjusted pixel value is at an extreme value then determine the amount of color in the adjusted pixel versus a neutral pixel (step 28 show a mapping of adjusted pixel with white pixel; neutral pixel is provided by $L=255$ i.e. white pixel);

if the amount of color is larger than a predetermined threshold then change the luminance value away from its extreme value (column 3, lines 48-53);

if the amount of color is small than a predetermined threshold set the color of the pixel to zero (column 3, lines 53-62); and

if the luminance value is not an extreme, no change is made (third output of step 30 which does not represent “Yes” or “No” in Figure 2 is directly connected to step 36 showing no change).

As to claims 2 and 11, Feng et al. disclose the method according to claim 1 where the look-up table content is modified automatically based on the analysis of the input image (column 4, lines 12-24).

Allowable Subject Matter

4. Claims 3-9, 12-18 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Other prior art cited

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Feng et al. (US 6,995,866 B2) disclose a method and apparatus for background adjustment in color reproduction devices.

Eschbach et al. (US 5,802,214) disclose a method for determining and loading an image-dependent look-up table for generating an enhanced image representation.

Fuss et al. (US 5,347,374) disclose a cascaded image processing using histogram prediction.

Eschbach et al. (US 5,363,209) disclose an image-dependent sharpness enhancement.

Eschbach (US 5,414,538) discloses an image-dependent exposure enhancement.


Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela C Chawan whose telephone number is. 571-272-7446. The examiner can normally be reached on Monday - Thursday 7.30 - 6.00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sheela Chawan
Patent Examiner
Group Art Unit 2624
August 31, 2006


SHEELA CHAWAN
PRIMARY EXAMINER